

# SECURE BROWSER FOR ONLINE EXAMS

Synopsis

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# **1 INTRODUCTION**

The Education system plays very vital role in country's economy and hence we should focus on improving the quality of education system,

The knowledge gain by the student throughout the course or teaching session has always been judged by exams in various fields and subject, which has always been conducted in the presence of invigilator, but now is the time to reduce time and cost of the conducting of exam.

## **1.1 Secure Online Browsing**

During conducting of exam, one of the primary aspect that is to be considered is limited access of the resources to the user like restriction of various undesirable applications, various operation like copy, paste , move etc. Continuous trying for using restricted resources may be notified to Examination Department.

## **1.2 Online Exam Proctoring(OEP)**

Online Exam Proctoring(OEP) is the process of invigilating/ monitoring the candidate during online scheduled exam remotely, with the help of webcam, mic and wearcam (access to the screen of the candidate).

## **1.3 Authentication Phase**

This paper is designed to cover the various aspects by which an unintended activity can be traced or detected, and hence, the first activity should be the authenticity of the user before the initiation of Online Exam. And this can be performed in two two ways.

### **1.3.1 Static Authentication**

Process of static authentication is done by user/candidate/student by entering the userId and passcode.

### **1.3.2 Real Time Face Authentication**

In real time face authentication, the generation of encoded value of face is also generated in same go and will be compared

Username

Student ID

Password

.....

SUBMIT

Close

Figure 1: Static Authentication of User

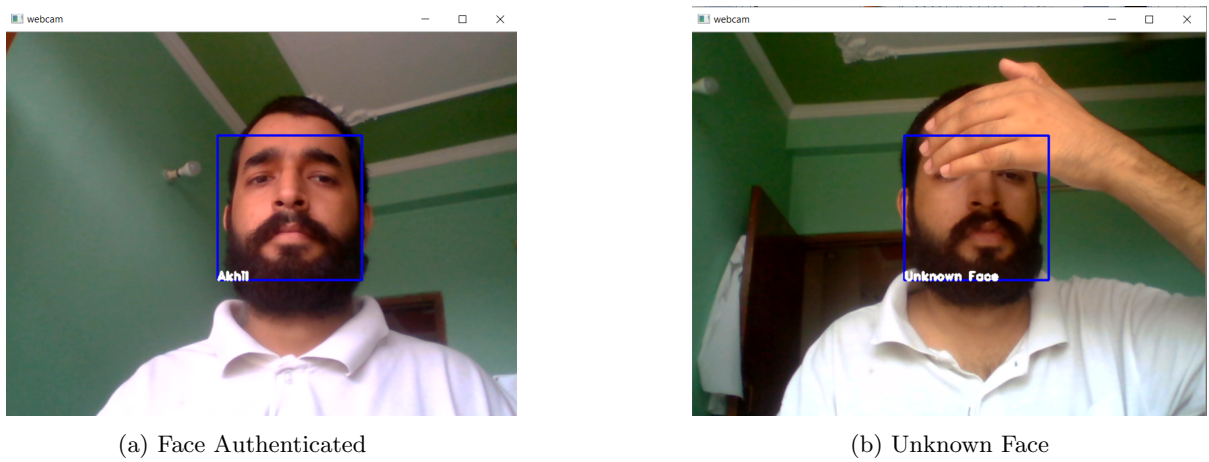


Figure 2: Real Time Face Authentication of User

## **2 PROBLEM FORMULATION**

### **2.1 Need**

One to one proctoring can easily be seen/observed and be reported immediately with traditional browsing applications, for instance the recruitment agencies and companies are conducting recruitment process remotely during this pandemic, but considering proctoring of exam, it is challenging to minimising the time and cost to conduct fair exams as factor of invigilation is now needed to greater extent and hence more secure browsing application is to be desgined.

### **2.2 Significance**

While candidate/student can appear for the exam remotely, it will minimize the time and cost and facilitate the process of examination.

### **3 OBJECTIVE**

Our main objective is to conduct fair exam remotely and notify students and exam cell head if any undesired activity seems to take place so that proper response of questions attempted by user/candidate can be provided to the Examination Department. The person should be physically himself/herself present and there should no other unfair practices can be done like switching of the multiple tabs , restriction of undesired keys like copy, paste etc. and for security issues while updating the result(attendance) on the server.

**So develop a secure and fair examination portal (remotely).**

## 4 MOTIVATION

During current COVID-19, there is a delay in the examination or student are promoted as there assignment and other evaluation. There is a need generated to conduct online examination and to setup rule (protocol) for fair examination.

As invigilator cannot be physically present and we still need to conduct fair examination to evaluate the gained knowledge by the students.

So Online Exam Proctoring(OEP) comes into picture.

## 5 ACTIVITY CHART

[illegible]



## References

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